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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,509	07/21/2003	Takeshi Kashiwada	1046.1296	3797

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EXAMINER	
CERVONE, MICHAEL ANTHONY	
ART UNIT	PAPER NUMBER
2131	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/21/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/622,509	KASHIWADA, TAKESHI	
	Examiner	Art Unit	
	Michael A. Cervone	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Attached*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Objections

2. Claims 11 and 22 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Examiner interprets claims 11 and 22 as the last limitation of claims 1 and 12, and therefore is not further limiting.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moshir et al. (US 2004/0003266) in view of Dillard et al. (US 2001/0014884).

8. As per claim 1, Moshir is directed to a control system having a download function, comprising: a first storage element storing execution program data for executing a control function in a rewritable status (software) [See 0059]; a second storage element storing a download module containing fresh pieces of update target execution program data and module identifying information [See 0073]; a first control unit receiving the download module encrypted by an encryption key [See 0109, 0152-

0153 and 0160], and storing the received download module in said second storage element [See 0073]; and a second control unit decrypting the download module by an encryption key [See 0109, 0152-0153 and 0160] and replacing, when a storage start address, a data length and a check digit that are encrypted in the download module are decrypted into valid values in a plain text [See 0160, 0123 and 0107], the execution program data in said first storage element with the fresh execution program data decrypted [See 0030 and 0073]. Moshir teaches that an encryption key is used in order to encrypt the download when it is transferred over an SSL connection [See 0160] but fails to teach the encryption key is generated from data in the execution program data in said first storage element and from data of the download module in said second storage element. Dillard is directed to a method for protecting updates transmitted over the internet which teaches the encryption key is generated from data in the execution program data in said first storage element and from data of the download module in said second storage element [See 0026 and 0031]. Moshir and Dillard are analogous art because they are both directed to methods for securely updating program files. In order to exchange information securely using SSL, an encryption key must first be shared between the communicating ends. It would be obvious to one skilled in the art to use Dillard's software key as this encryption key. Doing so would prevent unauthorized use of the updated program file [See 0010]. A person without the original program would not be able to obtain the key and receive an updated version.

9. As per claim 2, Moshir and Dillard are applied as stated in the rejection of claim 1. Moshir further teaches a third control unit making the download module receivable that contains the fresh execution program data for only a predetermined fixed period of time after starting the download function [See 0073 (specific time of day) and 0162 (specific time period)].

10. As per claim 3, Moshir and Dillard are applied as stated in the rejection of claim 1. Moshir further teaches a fourth control unit making the download module receivable that contains the fresh execution program data by restarting the download function when receiving a specified reset command in a state of being unable to receive the download module [See 0072].

11. As per claim 4, Moshir and Dillard are applied as stated in the rejection of claim 3. Moshir further teaches a third storage element storing a loader (updater agent) executed first when starting the download function, storing the download module in said second storage element and executing the execution program data for the control function that are stored in said first storage element [See 0122-0125].

12. As per claim 5, Moshir and Dillard are applied as stated in the rejection of claim 4. Moshir further teaches a fifth control unit making the execution program data in said first storage element executable by the loader when a check digit value (CRC and/or digital signature) obtained as a result of calculation based on all pieces of data in the

execution program data in said first storage element, is coincident with data in a specified address in the execution program data in said first storage element [See 0153 and 0160].

13. As per claim 6, Moshir and Dillard are applied as stated in the rejection of claim 5. Moshir further teaches a sixth control unit storing the execution program data, executable and stored in said first storage element, in said third storage element stored with the loader, and restoring the control function by storing said first storage element with the loader's own execution program data in said third storage element when judging that the execution program data can not be executed as a result of checking the execution program data in said first storage element upon a startup of the loader [See 0074-0077].

14. As per claim 7, Moshir and Dillard are applied as stated in the rejection of claim 5. Moshir further teaches a seventh control unit enabling the fresh execution program data to be stored by initializing said first storage element into a known status when judging that the execution program data cannot be executed as a result of checking the execution program data in said first storage element upon a startup of the loader [See 0074-0077].

15. As per claim 8, Moshir and Dillard are applied as stated in the rejection of claim 6. Moshir further teaches an eighth control unit setting a queuing time till the loader's

own execution program data are stored in said first storage element, and restricting a repetition of initializing said first storage element by the loader and storing said second storage element with the download module containing unlawful execution program data [See 0070-0071, 0074-0077, and 0122-0125].

16. As per claim 9, Moshir and Dillard are applied as stated in the rejection of claim 7. Moshir further teaches a ninth control unit setting a queuing time till said first storage element is initialized by the loader, and restricting a repetition of initializing said first storage element by the loader and storing said second storage element with the download module containing unlawful execution program data [See 0070-0071, 0074-0077, and 0122-0125].

17. As per claim 10, Moshir and Dillard are applied as stated in the rejection of claim 1. Moshir further teaches a that the download module is structured of a fixed-length header field stored with the module identifying information containing at least a module name, a module creation date, a module version number and a storage start address, and at least one data field stored with a block length and data having a length corresponding to this block length, and there is encrypted a block having the data field containing an actual data length corresponding to the execution program data, a storage start address, the execution program data, pad data for adjusting a data length to a cipherable length and a check digit generated from the above data [See 0107 and 0160].

18. As per claim 11, Moshir and Dillard are applied as stated in the rejection of claim 10. Moshir fails to teach that the encryption key is generated from data in the execution program and from module identification information. Dillard is directed to a method for protecting updates transmitted over the internet which teaches the encryption key is generated from data in the execution program data in said first storage element and from data of the download module in said second storage element [See 0026 and 0031]. Moshir and Dillard are analogous art because they are both directed to methods for securely updating program files. In order to exchange information securely using SSL, an encryption key must first be shared between the communicating ends. It would be obvious to one skilled in the art to use Dillard's software key as this encryption key. Doing so would prevent unauthorized use of the updated program file [See 0010]. A person without the original program would not be able to obtain the key and receive an updated version.

19. Claims 12-22 are directed to "method" claims analogous to "system" claims 1-11. Claims 12-22 are rejected based on the same rationale as the rejection of claims 1-11.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chu et al. (US 2002/0049853) is directed to a method for secure end-to-end transfer of software and other files. Ronning (US 5,907,617) is directed to a

method for encryption of try before you buy software. Durbin (US 2002/0055910) is directed to secure distribution of software components. Kubota et al. (US RE38,236) is directed to distribution of software updates.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Cervone whose telephone number is 571-272-3712. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAC 12/16/06

CHRISTOPHER REVAK
PRIMARY EXAMINER